

Serial No. 09/628,568
Reply to Office Action of: August 18, 2003
Amendment dated February 18, 2004

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A nucleic acid encoding a modified polypeptide with an improved *in vivo* half-life, said modified polypeptide comprising an Ig constant domain or Ig-like constant domain and a salvage receptor binding epitope within said Ig constant domain or Ig-like constant domain, wherein said epitope is absent from the unmodified polypeptide, wherein said salvage receptor binding epitope is taken from at least one loop of the CH₂ domain of an Fc region of an Ig molecule and wherein said polypeptide in modified form does not comprise an intact CH₂ domain or an intact Fc region.

2-20. (Cancelled)

21. (Previously presented) The nucleic acid of claim 1 wherein the Ig domain or Ig-like domain comprises a CH₁ domain.

22. (Previously presented) The nucleic acid of claim 1 wherein the unmodified polypeptide is an Fab, an (Fab)₂, or a receptor.

23. (Previously presented) The nucleic acid of claim 22 wherein the unmodified polypeptide is an anti-CD18 Fab or an anti-CD18 (Fab)₂.

24. (Previously presented) The nucleic acid of claim 23 wherein the modified polypeptide is human or humanized.

25. (Currently Amended) The nucleic acid of claim 1 wherein said salvage receptor epitope-binding epitope comprises amino acids from 1 through 11 of SEQ ID NO:3.

Serial No. 09/628,568
Reply to Office Action of: August 18, 2003
Amendment dated February 18, 2004

26. (Currently amended) The A nucleic acid of claim 1 wherein said salvage receptor binding epitope comprises amino acids from 1 through 11 of SEQ ID NO: 3 and amino acids from 1 through about 7 of SEQ ID NO: 11 encoding a modified polypeptide with an improved in vivo half-life, said modified polypeptide comprising an Ig constant domain or Ig-like constant domain and a salvage receptor binding epitope within said Ig constant domain or Ig-like constant domain, wherein said epitope is absent from the unmodified polypeptide, wherein said salvage receptor binding epitope comprises an amino acid sequence methionine, isoleucine, serine(MIS) with a threonine (T) residue one amino acid C terminal to the MIS and an amino acid sequence histidine, glutamine, asparagine (HQN) with an aspartic acid (D) residue two amino acids C terminal to the HQN sequence and a lysine (K) residue one amino acid C terminal to the D residue, and wherein said polypeptide in modified form does not comprise an intact CH₂ domain or an intact Fc region.

27. (Currently Amended) The nucleic acid of claim 1 26 wherein said salvage receptor binding epitope comprises amino acids from 1 through 11 of SEQ ID NO: 3 and amino acids from 1 through about 8 of SEQ ID NO: 11 the unmodified polypeptide is selected from the group consisting of anti-CD18 Fab and anti-CD18 (Fab)₂.

28. (Currently Amended) The nucleic acid of claim 1 wherein said salvage receptor binding epitope comprises amino acids from 1 through 11 of SEQ ID NO: 3 and amino acids from 1 through 8 of SEQ ID NO: 31 any one claims 1 or 26, wherein the unmodified polypeptide is selected from the group consisting of an LFA-1 antagonist, a growth hormone and a nerve growth factor.

29. (New) A vector comprising the nucleic acid of any one of claims 1 and 21-28.

30. (New) A host cell comprising the nucleic acid of any one of claims 1 and 21-28.

31. (New) A method for producing a modified polypeptide comprising culturing the host cell according to claim 30 in a culture medium and recovering the modified polypeptide.